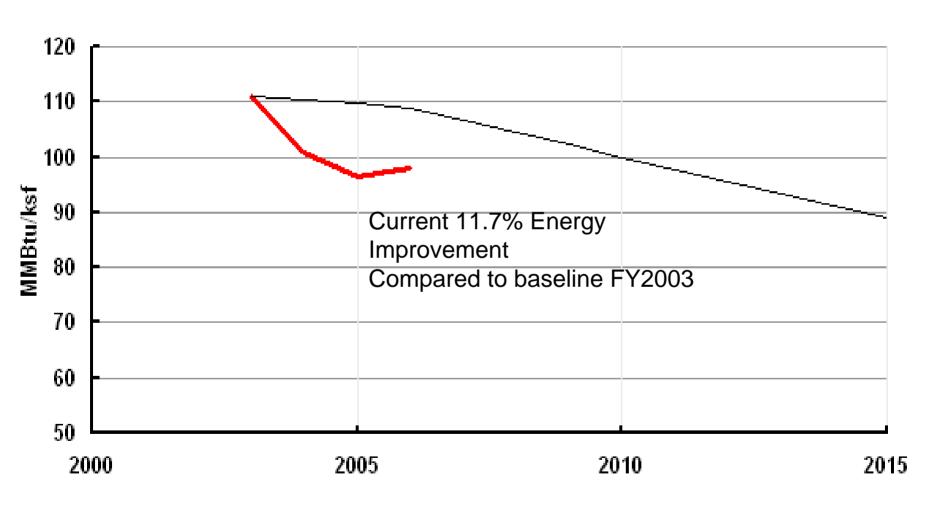
#### Fort Rucker Energy Plan

### **Energy Goals**

- 2% per year energy reduction goal
- 11.7% improvement compared to FY03
- Current savings consistent with FY11 target
- Will continue to set a 2% reduction annual reduction goal

# **Energy Glide Path**



Fort Rucker Energy Reduction Glide Path

#### Impact of RCI

 The impact to our energy goal is slight turn in the upward direction. This is due to the fact that family housing square footage is typically less energy intensive than large industrial and administrative facilities.

# UESC Contract with South Alabama Electric Cooperative and Siemens Corp.

- 2 HVAC upgrade projects in FY 05.
- Awarded a Hangar HVAC upgrade at Cairns Field with alternative financing.
- More "paid from savings" energy projects.
- Plan is to exploit this option to the fullest to achieve maximum energy savings as well as eliminate fuel oil boilers, improve HVAC, lighting, etc.

# Paid from Savings Projects

- Costly HVAC repair "bundled" with quick payback projects such as lighting.
- Leverage energy savings to get much needed building repairs/renovations where O&M funding is insufficient
- Stretching the DPP out to 9.9 years to get more work done

# Lighting Strategies

- Replace Metal Halide lamps in high bays with high output T5 fluorescent lamps.
- Replace T-12 fluorescent lamps with T-8 fluorescent lamps in Admin areas.
- Replace incandescent lamps with compact fluorescent lamps.
- Consider lighting controls wherever economically feasible.

#### **HVAC** strategies

- Consider Air Cooled chillers as a replacement strategy for all existing water cooled chiller applications, due to lower maintenance.
- Replace existing hydronic heating systems in Hangars with Infrared heat, eliminating all fuel oil boilers and steam systems.
- Install Heat Pumps to condition administrative areas inside Hangars.

### Metering Strategies

- Need to maintain meter reading on existing metered buildings
- Need to maintain monthly logs on consumption for future reference
- Need to add energy intensive buildings to the meter read list, or install meters as necessary.
- EMCS can remotely provide data once it is upgraded.

#### **EMCS Strategies**

- Costly, with growing pains, but will pay for itself over time.
- EMCS can monitor building performance and relative "costs of doing business".
- Information is power, we can adjust and tune buildings for optimal performance and save a ton of money.